

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 7 are canceled.

8. (New) A fuel cell system equipped with a fuel cell for generating power by circulating a fuel gas, said system comprising:

a fuel gas supply source for supplying said fuel gas;

a circulation route for circulating the fuel gas supplied to said fuel cell;

drive means provided in said circulation route and serving to circulate said fuel gas by controlling a drive quantity; and

pressure regulating means provided between said fuel gas supply source and said circulation route and serving to regulate variably a pressure of the fuel gas in said circulation route to a predetermined pressure, wherein

said pressure regulating means makes up a deficiency of said fuel gas according to a variation of a required gas quantity required in said fuel cell by controlling a pressure of the fuel gas in said circulation route, while inhibiting a variation of said drive quantity in said drive means.

9. (New) A fuel cell system comprising:

a fuel cell for generating power by circulating a fuel gas;

a fuel gas supply source for supplying said fuel gas to said fuel cell;

a circulation route for circulating the fuel gas supplied to said fuel cell;

drive means provided in said circulation route and serving to circulate said fuel gas;

pressure regulating means provided between said fuel gas supply source and said circulation route and serving to regulate the pressure of the fuel gas in said circulation route to a predetermined pressure; and

control means for controlling a drive quantity of said drive means and variably regulating said pressure regulating means, wherein

said control means makes up a deficiency of said fuel gas according to a variation of a required gas quantity required in said fuel cell by regulating a pressure of the fuel gas in said circulation route with said pressure regulating means, while inhibiting a variation of said drive quantity in said drive means.

10. (New) The fuel cell system according to claim 8, wherein said pressure regulating means raises the pressure of the fuel gas in said circulation route according to the increase in a required gas quantity that is required in said fuel cell.

11. (New) The fuel cell system according to claim 8, wherein in a region in which at least the required gas quantity is higher than a standard value, the pressure regulation quantity of said pressure regulating means is varied correspondingly to a variation of said required gas quantity.

12. (New) The fuel cell system according to claim 8, wherein in a region where said required gas quantity is higher than a standard value, a variation rate of the drive quantity of said drive means is reduced with respect to that of a region where said required gas quantity is lower than said standard value.

13. (New) The fuel cell system according to claim 8, wherein in a region where said required gas quantity is lower than a standard value, the pressure regulation quantity of said pressure regulating means is maintained equal to or less than a constant value.

14. (New) The fuel cell system according to claim 8, wherein said drive means is controlled based on said required gas quantity and a measured value of pressure inside said circulation route.

15. (New) The fuel cell system according to claim 8, further comprising
means for determining a drive characteristic of said drive means based on a generated power required for said fuel cell; and
means for determining the pressure regulation quantity provided by said pressure regulating means based on said drive characteristic, which is set.

16. (New) The fuel cell system according to claim 8, wherein in a region in which at least the required gas quantity is higher than a standard value, a drive quantity of said drive means is suppressed and a pressure regulation quantity of said pressure regulating means is varied so as to make up the deficiency of the drive quantity of said drive means.

17. (New) The fuel cell system according to claim 8, wherein a pressure of said pressure regulating means can be regulated correspondingly to a variation of an air pressure controlled by opening and closing a pair of shut-off valves.

18. (New) The fuel cell system according to claim 8, wherein said drive means is any one from among a pump, a compressor, and a turbine.

19. (New) The fuel cell system according to claim 8, wherein said fuel gas supply source is a hydrogen tank filled with hydrogen.

20. (New) The fuel cell system according to claim 8, wherein in a region in which at least the required gas quantity is higher than a standard value, a pressure regulation quantity of said pressure regulating means is varied monotonously.

21. (New) The fuel cell system according to claim 8, wherein a pressure regulation quantity of said pressure regulating means is varied continuously and gradually from a region in which at least the required gas quantity is equal to or lower than a standard value to a region in which at least the required gas quantity is higher than said standard value.

22. (New) The fuel cell system according to claim 8, wherein both a drive quantity of said drive means and a pressure regulation quantity of said pressure regulating means are varied in a region in which at least the required gas quantity is higher than a standard value.

23. (New) A drive method for a fuel cell system equipped with a fuel cell for generating power by circulating a fuel gas, the drive method comprising the steps of:
estimating a required gas quantity required in said fuel cell; and
making up a deficiency of said fuel gas according to a variation of said required gas quantity, which is estimated, by regulating a pressure of the fuel gas in a circulation route, in which the fuel gas supplied to said fuel cell is circulated, while inhibiting a variation of the drive quantity for circulating said fuel gas.